



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R07-OAR-2021-0365; FRL-10024-81-Region 7]

Interstate Transport Prongs 1 and 2 for the 2010 Sulfur Dioxide (SO₂) Standard for Kansas and Nebraska

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve State Implementation Plan (SIP) submissions from Kansas and Nebraska addressing the Clean Air Act (CAA or Act) interstate transport SIP requirements for the 2010 Sulfur Dioxide (SO₂) National Ambient Air Quality Standards (NAAQS). These submissions address the requirement that each SIP contain adequate provisions prohibiting air emissions that will have certain adverse air quality effects in other states. The EPA is proposing to approve portions of these infrastructure SIPs for the aforementioned states as containing adequate provisions to ensure that air emissions in the states will not significantly contribute to nonattainment or interfere with maintenance of the 2010 SO₂ NAAQS in any other state.

DATES: Comments must be received on or before **[insert date 30 days after date of publication in the Federal Register]**.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-R07-OAR-2021-0365. All documents in the docket are listed on the <https://www.regulations.gov> web site. Although listed in the index, some information may not be publicly available, i.e., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through www.regulations.gov or in hard copy at the Atmospheric Programs

Section, Air Quality Planning Branch, Air and Radiation Division, U.S. Environmental Protection Agency, Region 7, 11201 Renner Boulevard, Lenexa, Kansas 66219. The EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday 8:30 a.m. to 4:30 p.m., excluding federal holidays.

FOR FURTHER INFORMATION CONTACT: Ashley Keas, Environmental Protection Agency, Region 7 Office, Air Quality Planning Branch, 11201 Renner Boulevard, Lenexa, Kansas 66219 at (913) 551-7629, or by email at keas.ashley@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document “we,” “us,” and “our” refer to the EPA.

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I. Written Comments

Submit your comments, identified by Docket ID No. EPA-R07-OAR-2021-0365 at <https://www.regulations.gov>. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information

(CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

II. Background

A. Infrastructure SIPs

On June 2, 2010, the EPA established a new primary 1-hour SO₂ NAAQS of 75 parts per billion (ppb), based on a three-year average of the annual 99th percentile of 1-hour daily maximum concentrations.¹ The CAA requires states to submit, within three years after promulgation of a new or revised NAAQS, SIPs meeting the applicable “infrastructure” elements of sections 110(a)(1) and (2). One of these applicable infrastructure elements, CAA section 110(a)(2)(D)(i), requires SIPs to contain “good neighbor” provisions to prohibit certain adverse air quality effects on neighboring states due to interstate transport of pollution.

Section 110(a)(2)(D)(i) includes four distinct components, commonly referred to as “prongs,” that must be addressed in infrastructure SIP submissions. The first two prongs, which are codified in section 110(a)(2)(D)(i)(I), require SIPs to contain adequate provisions that prohibit any source or other type of emissions activity in one state from contributing significantly to nonattainment of the NAAQS in another state (prong 1) and from interfering with maintenance of the NAAQS in another state (prong 2). The third and fourth prongs, which are codified in section 110(a)(2)(D)(i)(II), require SIPs to contain adequate provisions that prohibit

¹ 75 FR 35520 (June 22, 2010).

emissions activity in one state from interfering with measures required to prevent significant deterioration of air quality in another state (prong 3) or from interfering with measures to protect visibility in another state (prong 4).

In this action, the EPA is proposing to approve the prong 1 and prong 2 portions of infrastructure SIP submissions submitted by Kansas on April 7, 2020, and Nebraska on October 27, 2020, as demonstrating that the SIP contains adequate provisions to ensure that air emissions from sources in these states will not significantly contribute to nonattainment or interfere with maintenance of the 2010 SO₂ NAAQS in any other state or each other. All other applicable infrastructure SIP requirements for these SIP submissions are addressed in separate rulemakings.

B. 2010 1-hour SO₂ NAAQS Designations

In this action, the EPA has considered information from the 2010 1-hour SO₂ NAAQS designations process, as discussed in more detail in Section IV of this document. For this reason, a brief summary of the EPA's designations process for the 2010 1-hour SO₂ NAAQS is included here.² All technical support documents referenced throughout this document are also included in the docket for this action.

After the EPA establishes a new or revised NAAQS, the EPA is required to designate areas as “nonattainment,” “attainment,” or “unclassifiable,” pursuant to section 107(d)(1) of the CAA. The process for designating areas following promulgation of a new or revised NAAQS is contained in section 107(d) of the CAA. The CAA requires the EPA to complete the initial designations process within two years of promulgating a new or revised standard. If the

² While designations may provide useful information for purposes of analyzing transport, the EPA notes that designations themselves are not dispositive of whether or not upwind emissions are impacting areas in downwind states. The EPA has consistently taken the position that CAA section 110(a)(2)(D) requires elimination of significant contribution and interference with maintenance in other states, and this analysis is not limited to designated nonattainment areas. Nor must designations for nonattainment areas have first occurred before states or the EPA can act under section 110(a)(2)(D). *See e.g.*, Clean Air Interstate Rule, 70 FR 25162, 25265 (May 12, 2005); Cross-State Air Pollution Rule, 76 FR 48208, 48211 (Aug. 8, 2011); Final Response to Petition from New Jersey Regarding SO₂ Emissions From the Portland Generating Station, 76 FR 69052 (Nov. 7, 2011) (finding facility in violation of the prohibitions of CAA section 110(a)(2)(D)(i)(I) with respect to the 2010 1-hour SO₂ NAAQS prior to issuance of designations for that standard).

Administrator has insufficient information to make these designations by that deadline, the EPA has the authority to extend the deadline for completing designations by up to one year.

The EPA Administrator signed the first round of designations (“round 1”)³ for the 2010 1-hour SO₂ NAAQS on July 25, 2013, designating 29 areas in 16 states as nonattainment for the 2010 1-hour SO₂ NAAQS. *See* 78 FR 47191 (August 5, 2013). The EPA Administrator signed *Federal Register* documents for round 2 designations⁴ on June 30, 2016 (81 FR 45039 (July 12, 2016)), and on November 29, 2016 (81 FR 89870 (December 13, 2016)), round 3 designations⁵ on December 21, 2017 (83 FR 1098 (January 9, 2018)), and round 4 designations⁶ on December 21, 2020 (86 FR 16055 (March 26, 2021)) and on April 8, 2021 (86 FR 19576 (April 14, 2021)).⁷

At the time of this proposed action, there are no nonattainment areas for the 2010 1-hour SO₂ NAAQS in Kansas or Nebraska. There are two areas designated as unclassifiable, one in Kansas and one in Nebraska, the remaining areas in these states are designated as attainment/unclassifiable.

III. Relevant Factors to Evaluate 2010 SO₂ Interstate Transport SIPs

Although SO₂ is emitted from a similar universe of point and nonpoint sources, interstate transport of SO₂ is unlike the transport of fine particulate matter (PM_{2.5}) or ozone, in that SO₂ is not a regional pollutant and does not commonly contribute to widespread nonattainment over a large (and often multi-state) area. The transport of SO₂ is more analogous to the transport of lead

³ The term “round” in this instance refers to which “round of designations.”

⁴ EPA and state documents and public comments related to the round 2 final designations are in the docket at regulations.gov with Docket ID No. EPA-HQ-OAR-2014-0464 and at the EPA's website for SO₂ designations at <https://www.epa.gov/sulfur-dioxide-designations>.

⁵ EPA and state documents and public comments related to round 3 final designations are in the docket at regulations.gov with Docket ID No. EPA-HQ-OAR-2017-0003 and at the EPA's website for SO₂ designations at <https://www.epa.gov/sulfur-dioxide-designations>.

⁶ EPA and state documents and public comments related to round 4 final designations are in the docket at regulations.gov with Docket ID No. EPA-HQ-OAR-2020-0037 and at the EPA's website for SO₂ designations at <https://www.epa.gov/sulfur-dioxide-designations>.

⁷ The Round 4 2010 SO₂ NAAQS designations action was signed by then EPA Administrator, Andrew Wheeler, on December 21, 2020, pursuant to a court-ordered deadline of December 31, 2020. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, Acting Administrator Jane Nishida re-signed the same action on March 10, 2021 for publication in the *Federal Register*.

(Pb) because its physical properties result in localized pollutant impacts very near the emissions source. However, ambient concentrations of SO₂ do not decrease as quickly with distance from the source as Pb because of the physical properties and typical release heights of SO₂. Emissions of SO₂ travel farther and have wider ranging impacts than emissions of Pb but do not travel far enough to be treated in a manner similar to ozone or PM_{2.5}. The approaches that the EPA has adopted for ozone or PM_{2.5} transport are too regionally focused and the approach for Pb transport is too tightly circumscribed to the source. SO₂ transport is therefore a unique case and requires a different approach.

Given the physical properties of SO₂, the EPA selected the “urban scale” – a spatial scale with dimensions from 4 to 50 kilometers (km) from point sources – given the usefulness of that range in assessing trends in both area-wide air quality and the effectiveness of large-scale pollution control strategies at such point sources.⁸ The EPA’s selection of this transport distance for SO₂ is based upon 40 CFR part 58, appendix D, section 4.4.4(4) “Urban scale,” which states that measurements in this scale would be used to estimate SO₂ concentrations over large portions of an urban area with dimensions from four to 50 km. The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) is the EPA’s preferred modeling platform for regulatory purposes for near-field dispersion of emissions for distances up to 50 km. *See* appendix W of 40 CFR part 51. As such, the EPA utilized an assessment up to 50 km from point sources in order to assess trends in area-wide air quality that might impact downwind states.

As discussed in Section IV of this proposed action, the EPA first reviewed each state’s analysis to assess how the state evaluated the transport of SO₂ to other states, the types of information used in the analysis and the conclusions drawn by the state. The EPA then conducted

⁸ For the definition of spatial scales for SO₂, please see 40 CFR part 58, appendix D, section 4.4 (“Sulfur Dioxide (SO₂) Design Criteria”). For further discussion on how the EPA is applying these definitions with respect to interstate transport of SO₂, *see* the EPA’s proposal on Connecticut’s SO₂ transport SIP. 82 FR 21351, 21352, 21354 (May 8, 2017).

a weight of evidence analysis, including review of each state’s submission and other available information, including air quality, emission sources and emission trends within the state and in bordering states to which it could potentially contribute or interfere.⁹

IV. States’ Submissions and EPA’s Analysis

In this section, we provide an overview of each state’s 2010 SO₂ transport analysis, as well as the EPA’s evaluation of prongs 1 and 2 for each state. Table 1 shows emission trends for the states addressed in this document along with their neighboring states.¹⁰ Table 2 shows ambient air monitoring data for monitors located within 50 km of the borders of either Kansas or Nebraska. Table 3 shows emissions trends for sources in Kansas and Nebraska emitting over 100 tons per year (tpy) located within 50 km of the border with another state. Tables 1, 2 and 3 will be referenced as part of the EPA’s analysis for each state.

Table 1. Statewide SO₂ Emission Trends (in tons per year)

State	2000	2005	2010	2015	2019	SO₂ reduction, 2000-2019
Colorado	115,122	80,468	60,459	28,860	17,045	85%
Iowa	265,005	222,419	142,738	84,932	64,294	76%
Kansas	148,416	199,006	80,267	36,828	24,855	83%
Missouri	401,287	425,167	321,059	158,998	110,888	72%
Nebraska	86,894	121,785	77,898	63,237	51,886	40%
Oklahoma	145,862	169,464	136,348	99,095	45,996	68%
South Dakota	41,120	28,579	16,202	11,975	5,093	88%
Wyoming	141,439	122,453	91,022	53,335	42,191	70%

Table 2. SO₂ Monitor Values Within 50 km of the Nebraska or Kansas Border

⁹ This proposed approval action is based on the information contained in the administrative record for this action and does not prejudice any other future EPA action that may make other determinations regarding any of the subject state’s air quality status. Any such future actions, such as area designations under any NAAQS, will be based on their own administrative records and the EPA’s analyses of information that becomes available at those times. Future available information may include, and is not limited to, monitoring data and modeling analyses conducted pursuant to the EPA’s SO₂ Data Requirements Rule (80 FR 51052, August 21, 2015) and information submitted to the EPA by states, air agencies, and third party stakeholders such as citizen groups and industry representatives.

¹⁰ This emissions trends information was derived from the EPA’s Web page <https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data>.

State/Area	Site ID	Distance to Kansas Border (km)* (Nearest State Listed for Monitors in Kansas)	Distance to Nebraska Border (km)* (Nearest State Listed for Monitors in Nebraska)	2017-2019 Design Value (ppb)¹¹
South Dakota/ Sioux City	461270001	305	10	3
Kansas/ Wyandotte County	202090021	2 (Missouri)	114	6
Nebraska/ Omaha	310550053	147	0.5 (Iowa)	41
Nebraska/ Omaha	310550019	138	4.5 (Iowa)	24
Nebraska/ Omaha	310550057	146	1.5 (Iowa)	34
Missouri/ Jackson County	290950034	3	118	10
Oklahoma/ Ponca City	400710604	33	367	28
Oklahoma/ Enid	400470555	54	387	48

*All distances throughout this document are approximations.

Table 3. SO₂ Emission Trends for Kansas and Nebraska Sources within 50 km of a State Border

State/ County	Facility Name	EIS Facility ID	Distance to Nearest State (km)	SO₂ Emissions (tons)				% Change
				2011	2014	2017	2019	2011-2019
Kansas/ Johnson	AGC Flat Glass	4538011	18, Missouri	243.83	154.51	157.42	133.06	-45.43
Kansas/ Linn	Evergy – La Cygne	5367811	3, Missouri	17,872.15	12,639.08	619.07	719.98	-95.97
Kansas/ Douglas	Evergy – Lawrence	4827111	44, Missouri	2,792.76	1,845.46	295.11	471.72	-83.11
Kansas/ Wyandotte	Kansas City BPU – Nearman	4633811	0.5, Missouri	5,989.47	5,332.61	904.01	1,203.00	-79.91
Nebraska / Otoe	Nebraska City Station	7303711	0.3, Iowa	17,334.65	16,134.40	15,950.20	10,386.51	-40.08
Nebraska / Douglas	North Omaha Station	6732411	0.3, Iowa	14,069.34	11,244.90	7,896.85	5,792.82	-58.83
Nebraska / Cass	Ash Grove	7287311	24, Iowa	1,067.12	1,250.77	694.12	681.44	-36.14

¹¹ Data retrieved from the EPA's <https://www.epa.gov/air-trends/air-quality-design-values#report>.

	Cement Company							
Nebraska / Dodge	Lon D Wright Power Plant	776611	33, Iowa	1,399.76	2,231.52	926.23	985.08	-29.63
Nebraska / Kimball	Clean Harbors Environmental Services	776801	17, Colorado	0.62	222.81	221.36	205.93	33114.1 ¹²
Nebraska / Scotts Bluff	Western Sugar Cooperative	776791	35, Wyoming	151.66	149.08	176.80	144.71	-4.58
Nebraska / Douglas	Douglas County Recycling Landfill	769931	25, Iowa	111.98	102.53	131.04	164.59	46.98

A. Kansas

1. State's Analysis

In its SIP submittal, Kansas conducted a weight of evidence analysis to examine whether SO₂ emissions from Kansas adversely affect attainment or maintenance of the 2010 SO₂ NAAQS in downwind states.¹³ Kansas evaluated potential air quality impacts on areas outside the state through an assessment of whether SO₂ emissions from sources located within 50 km of Kansas' borders may have associated interstate transport impacts. The State's analysis included SO₂ emissions information in the state, with specific focus on sources and counties located within 50 km of Kansas' borders. Of the 11 facilities in Kansas with SO₂ emissions greater than 100 tpy, only four facilities are located within 50 km of Kansas' borders: AGC Flat Glass (18 km from Missouri), Evergy – La Cygne (3 km from Missouri), Evergy – Lawrence (44 km from Missouri), and Kansas City BPU – Nearman (0.6 km from Missouri). Kansas provided an in-

¹² The EPA notes that emissions for Clean Harbors Environmental Services decreased by 7.5% from 2014 to 2019.

¹³ See Kansas' SO₂ interstate transport SIP as submitted in January 2020 in the docket for this action.

depth analysis for these four facilities by assessing current permitted emissions rates and existing control technologies. Kansas also evaluated an additional six facilities with SO₂ emissions greater than 10 tpy but less than 100 tpy, located within 50 km of Kansas' borders. Kansas also reviewed meteorological conditions representative of SO₂ sources near the state's border, and the distances from identified SO₂ sources in Kansas to the nearest area that is not attaining the NAAQS or may have trouble maintaining the NAAQS in another state. Kansas also reviewed statewide emissions and ambient air monitoring trends. Finally, Kansas reviewed mobile source emissions data from highway and off-highway vehicles and population data in all of the Kansas counties which border other states. Based on this weight of evidence analysis, Kansas concluded that emissions from sources within the state will not contribute to nonattainment or interfere with maintenance of the 2010 SO₂ NAAQS in neighboring states.

2. The EPA's Prong 1 Evaluation

The EPA proposes to find that Kansas' SIP meets the interstate transport requirements of CAA section 110(a)(2)(D)(i)(I), prong 1 for the 2010 SO₂ NAAQS, as discussed below. To support our proposal, we completed a weight of evidence analysis which considers an evaluation of ambient air quality data and of available information for certain emission sources near the Kansas border, as well as available modeling results for sources in Kansas or neighboring states within 50 km of Kansas' borders. Based on that analysis, we propose to find that Kansas will not significantly contribute to nonattainment of the 2010 SO₂ NAAQS in any other state.

To assess ambient air quality, the EPA reviewed monitoring data in Kansas and neighboring states to see whether there were any monitoring sites, particularly near the Kansas border, with elevated SO₂ concentrations that might warrant further investigation with respect to interstate transport of SO₂ from emission sources in Kansas to a neighboring state near any given monitor. We reviewed 2017-2019 SO₂ design value concentrations at monitors with data

sufficient to produce valid 1-hour SO₂ design values for Kansas and neighboring states.¹⁴ In Table 2, we have included all monitors in each neighboring state and in Kansas within 50 km of the Kansas border. As shown, there are no violating design values in Kansas or neighboring states within 50 km of the state border. In Kansas' analysis, the state reviewed its potential impact on the existing 2010 SO₂ nonattainment area in Jackson County, Missouri, which is the only designated nonattainment area within 50 km of Kansas' borders.

The data presented in Table 2 shows that Kansas has one SO₂ monitor within 50 km of its borders, in Wyandotte County. The 2017-2019 design value for this monitor is 6 ppb, or 8% of the 75 ppb level of the NAAQS. Two monitors in neighboring states are located within 50 km of the Kansas border, and these monitors recorded SO₂ design values ranging between 13% and 37% of the level of the 2010 SO₂ NAAQS. Thus, these air quality data do not, by themselves, indicate any particular location that would warrant further investigation with respect to SO₂ emission sources that might significantly contribute to nonattainment in the bordering states. However, because the monitoring network is not necessarily designed¹⁵ to find all locations of high SO₂ concentrations, this observation indicates an absence of evidence of impact at these locations but is not sufficient evidence by itself of an absence of impact at all locations in the neighboring states. We have therefore considered additional evidence to support our conclusion that Kansas will not significantly contribute to nonattainment of the 2010 SO₂ NAAQS in any other state.

In the next step of our weight of evidence analysis, the EPA evaluated available modeling results for sources in Kansas and in the adjacent states that are within 50 km of the Kansas

¹⁴ Id.

¹⁵ State monitoring networks must meet the minimum monitoring requirements contained in appendix D to 40 CFR part 58. Specifically, section 4.4 of appendix D outlines the minimum monitoring requirements for SO₂ monitoring based on population weighted emissions. Monitors sited to meet the minimum monitoring requirements are sited for a number of reasons (e.g. measuring a source's maximum contribution, measuring background concentrations, monitoring population exposure, etc.) and may not necessarily capture maximum impacts from specific sources. However, data from these monitors may still provide useful evidence in the context of interstate transport.

border. The purpose for evaluating modeling for sources in Kansas within 50 km of the Kansas border is to determine whether these sources are, either on their own or in conjunction with other sources near the border, impacting a violation of the 2010 1-hour SO₂ NAAQS in another state. The purpose of evaluating modeling results in adjacent states within 50 km of the Kansas border is to ascertain whether there are any modeled violations in neighboring states to which sources in Kansas could potentially be contributing.

Table 4 provides a summary of the modeling results for two sources in Kansas which have available modeling information and are located within 50 km of another state: Evergy – La Cygne Generating Station (La Cygne) and the Board of Public Utilities Nearman Creek Station (Nearman). The modeling analyses resulted in no modeled violations of the 2010 1-hour SO₂ NAAQS within the modeling domain for each facility. The emission trends for these facilities are also provided in Table 3, and the EPA has verified that the most recent annual emissions are below the annual emissions from the years modeled at each modeled source. The modeling submitted by Kansas in September 2015 for La Cygne was based on allowable emissions and resulted in a maximum impact of 52.6 ppb or 70% of the level of the NAAQS.¹⁶ Kansas indicated in its SIP that Evergy La Cygne is comprised of two coal-fired boilers, one of which is equipped with a wet lime scrubber with a 95% efficiency for controlling SO₂ emissions.¹⁷ The emissions limits associated with these controls were modeled by Kansas and resulted in a concentration gradient within the domain that does not lead the EPA to believe that there would be substantial impacts beyond the modeling domain. There are no SO₂ sources in Missouri within 50 km of La Cygne around which the EPA would expect elevated concentrations to which La Cygne could contribute.

¹⁶ See the EPA's Technical Support Document for its Intended Round 2 Designations for the 2010 SO₂ NAAQS for Kansas available at: <https://www.epa.gov/sites/production/files/2016-03/documents/ks-epa-tds-r2.pdf> and the EPA's Technical Support Document for its Final Round 2 Designations for the 2010 SO₂ NAAQS for Kansas available at: https://www.epa.gov/sites/production/files/2016-07/documents/r7_ks_final_designation_tsd_06302016.pdf

¹⁷ Pursuant to La Cygne's operating permit No. O-11952 issued on May 14, 2018, units 1 and 2 are subject to an emissions limit of 0.10 pounds per Million British Thermal Units (lb/MMBtu) on a 30-day rolling average.

For Nearman, the EPA evaluated two sets of available modeling results. The first, depicted in Table 4, includes modeling submitted by the State of Kansas.¹⁸ That modeling was based on actual emissions from 2012-2014 and resulted in a maximum impact of 49.2 ppb, or 66% of the level of the NAAQS. The second set of modeling results was submitted by the State of Missouri and was the basis of the clean data determination for the Jackson County, Missouri 1-hour SO₂ nonattainment area. That modeling, depicted in Table 5 as associated with nearby sources in Missouri, included actual emissions for Nearman from 2016-2018.¹⁹ This modeling demonstrates that there are no violations in the designated Jackson County nonattainment area to which Kansas sources could contribute. Kansas explicitly reviewed the Jackson County, Missouri, 2010 1-hour SO₂ nonattainment area, as part of its analysis and concluded that Kansas sources do not contribute to violations in the area as it is no longer experiencing violations of the NAAQS. Further, the EPA previously determined that the Jackson County, Missouri nonattainment area has attained the standard and thereby the EPA agrees with Kansas' conclusion that there are no violations in this area to which Kansas sources could contribute.²⁰ Additionally, as shown in Table 2, the monitor in the Jackson County, Missouri nonattainment area is currently monitoring concentrations well below the level of the standard. Kansas indicated in its SIP that BPU-Nearman is comprised of two units, one of which is equipped with a circulating dry scrubber for SO₂ control.²¹ BPU-Nearman is also subject to the acid gas emissions limit of the Mercury and Air Toxics Standard (MATS) and opts to meet this limit by

¹⁸ See the EPA's Technical Support Document for its Intended Round 2 Designations for the 2010 SO₂ NAAQS for Kansas available at: <https://www.epa.gov/sites/production/files/2016-03/documents/ks-epa-tds-r2.pdf> and the EPA's Technical Support Document for its Final Round 2 Designations for the 2010 SO₂ NAAQS for Kansas available at: https://www.epa.gov/sites/production/files/2016-07/documents/r7_ks_final_designation_tsd_06302016.pdf

¹⁹ For more details on the modeling demonstration for Nearman and the nearby sources (i.e. sources in nearby Missouri) included in the modeling, see Determination of Attainment for the Jackson County, Missouri 1-Hour SO₂ NAAQS and Redesignation of the Wyandotte County, Kansas Unclassifiable Area to Attainment/Unclassifiable, 85 FR 41193, July 9, 2020.

²⁰ See Id.

²¹ Pursuant to Nearman's operating permit No. O-14125, Unit 001 is subject to an annual SO₂ emission limit of 3 lb/MMBtu [K.A.R. 28-19-31(c) and 40 CFR 60.45(g)(2)]; 0.8 lb/MMBtu derived from liquid fossil fuel [NSPS Subpart D40 CFR 60.43(a)(2)]; 1.2 lb/MMBtu derived from solid fossil fuel [NSPS Subpart D40 CFR 60.43(a)(1)].

complying with the SO₂ emissions limits spelled out in 40 CFR part 63, subpart UUUUU. Based on the downward trend in emissions since the modeled time period, specifically emissions from BPU-Nearman have decreased by approximately 80% from 2011 to 2019, the EPA finds the available modeling to be a conservative estimate of current actual air quality and an indicator that the Jackson County, Missouri area is not likely to experience issues maintaining the standard in the future. Additionally, it is unlikely that the emissions from these facilities could increase in the future to such a degree as to significantly contribute to nonattainment in any other state.

Table 4. Kansas Sources With Modeling Data Located Within 50 km of Another State

Kansas Source	County	2020 Emissions (tons)*	Distance from Source to Kansas Border (km)	Other Facilities Included in Modeling	Modeled 99th Percentile 1-hour SO₂ Maximum Concentration (ppb)	Model grid extends into another state?
La Cygne	Linn	725	2.8	None	52.60 (<i>based on allowable emissions</i>)	No
Nearman	Wyandotte	1,211	0.77	Numerous facilities located in Jackson County, Missouri	49.24 (<i>based on 2012-2014 actual emissions for all sources</i>)	Yes (<i>into Jackson and Platte County, Missouri</i>)

* Emissions data throughout this document were obtained using the EPA's Emissions Inventory System (EIS) Gateway.

Table 5 provides a summary of the available modeling results for sources with annual emissions of greater than 100 tons per year based on the latest available emissions inventory in neighboring states which are located within 50 km of Kansas: Every Hawthorn Generating Station (Hawthorn), Audubon Materials (Audubon), and Empire Asbury in Missouri, and Continental Carbon Black Production Facility in Ponca City, Oklahoma. As stated above, we consider the air quality near these sources in our analysis because, as a result of the localized nature of SO₂ as a pollutant, it is near these sources that sources in Kansas are more likely to contribute to a violation of the standard.

For Hawthorn and Audubon, the EPA similarly evaluated the modeling results of the clean data determination modeling for the Jackson County, Missouri 1-hour SO₂ nonattainment area, in which actual emissions for Hawthorn and Audubon were explicitly included. This modeling demonstrates that there are no violations in the designated Jackson County nonattainment area to which Kansas sources could contribute.²²

The modeling submitted by Missouri for the Empire Asbury facility was based on actual emissions and resulted in a maximum impact of 39 ppb, or 52% of the level of the NAAQS.²³ The Empire Asbury facility, located 2.5 km from the Kansas border, reported zero emissions in 2020 and officially retired in March 2020.²⁴ Additionally, there are no Kansas sources located within 50 km of the Empire Asbury facility. The modeling submitted by Oklahoma for the Continental Carbon facility in Kay, Oklahoma was based on actual emissions and resulted in a maximum impact of 65.1 ppb, or 87% of the level of the NAAQS.²⁵ However, the emissions for this facility have decreased from 5,893 tons in 2014 (the highest year in the modeled period) to 2,995 tons in 2019. Additionally, the Continental Carbon facility is located 37 km from the Kansas border and there are no sources in Kansas within 50 km of the Continental Carbon facility. The most recent available annual emissions for each source are also provided in Table 5, and the EPA has verified that the most recent annual emissions are below the annual emissions from the years modeled at each modeled source. For these reasons, the EPA finds there are no

²² See Determination of Attainment for the Jackson County, Missouri 1-Hour SO₂ NAAQS and Redesignation of the Wyandotte County, Kansas Unclassifiable Area to Attainment/Unclassifiable, 85 FR 41193, July 9, 2020.

²³ See the EPA's Technical Support Document for its Intended Round 3 Designations for the 2010 SO₂ NAAQS for Missouri available at: https://www.epa.gov/sites/production/files/2017-08/documents/22_mo_so2_rd3-final.pdf and the EPA's Technical Support Document for its Final Round 3 Designations for the 2010 SO₂ NAAQS for Missouri available at: <https://www.epa.gov/sites/production/files/2017-12/documents/22-mo-so2-rd3-final.pdf>

²⁴ In a letter dated December 3, 2019, from Liberty Utilities to the State of Missouri, Liberty Utilities requested that all air permits for the Empire Asbury facility become void on the permanent retirement date of March 1, 2020. This letter is included in the docket for this action.

²⁵ See the EPA's Technical Support Document for its Intended Round 3 Designations for the 2010 SO₂ NAAQS for Oklahoma available at: <https://www.epa.gov/sites/production/files/2017-12/documents/33-ok-so2-rd3-final.pdf> and the EPA's Technical Support Document for its Final Round 3 Designations for the 2010 SO₂ NAAQS for Oklahoma available at: <https://www.epa.gov/sites/production/files/2017-12/documents/33-ok-so2-rd3-final.pdf>

areas with modeled violations within 50 km of the Kansas border to which Kansas sources could be contributing.

Table 5. Other States' Sources With Modeling Data Located Within 50 km of Kansas

Source	County	2019 Emissions (tons)	Distance from Source to Kansas Border (km)	Other Facilities Included in Modeling	Modeled 99th Percentile 1-hour SO₂ Maximum Concentration (ppb)	Model grid extends into another state?
Evergy Hawthorn	Jackson, Missouri	929 [^]	9.7	Nearman (Wyandotte County, Kansas); other sources < 100 tons per year	43.47 (<i>based on 2016-2018 actual emissions for all sources</i>)	No
Audubon Materials, LLC Sugar Creek Plant	Jackson, Missouri	229	15	Nearman (Wyandotte County, Kansas); other sources < 100 tons per year of SO ₂	43.47 (<i>based on 2016-2018 actual emissions for all sources</i>)	No
Empire Asbury	Jasper/ Barton Counties, Missouri	0 [^]	2.5	Other Missouri sources < 100 tons per year of SO ₂	39.0 (<i>based on 2012-2014 actual emissions for all sources</i>)	Yes (<i>into Crawford and Cherokee Counties in Kansas</i>)
Continental Carbon Black Production Facility – Ponca City Plant	Kay, Oklahoma	2,995	37	Oklahoma Gas & Electric, Sooner Generating Station (Noble County, Oklahoma), Phillips 66 Company – Ponca City Refinery (Kay County, Oklahoma), 2 other Kay County, Oklahoma	65.1 (<i>based on 2012-2014 actual emissions for all sources</i>)	No

				sources < 100 tons per year of SO ₂		
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^Based on 2020 Emissions.

The EPA proposes to find that the modeling results summarized in Tables 4 and 5, which provide evidence that air quality near certain larger sources in other states is attaining the NAAQS, when weighed along with the other factors in this document, support the EPA's proposed conclusion that sources in Kansas will not significantly contribute to nonattainment of the 2010 1-hour SO₂ NAAQS in any other state.

The next step in our weight of evidence analysis is to assess certain other sources near the border for which we do not have available modeling or monitoring data. As noted in Section III of this document, the EPA finds that it is appropriate to examine the impacts of emissions from stationary sources in Kansas in distances ranging from 0 km to 50 km from the facility, based on the “urban scale” definition contained in appendix D to 40 CFR part 58, section 4.4. Kansas assessed point sources up to 50 km from state borders to evaluate trends and SO₂ concentrations in area-wide air quality. The list of sources emitting 100 tpy²⁶ or more of SO₂ within 50 km from state borders without available modeling data, is shown in Table 6.

Table 6. Kansas SO₂ Sources with No Available Modeling Data Near Neighboring States

Kansas Source	Facility ID	2019 SO₂ Emissions (tons)	Distance to Kansas Border (km)	Distance to Nearest Neighboring State SO₂ Source (km)	Neighboring State Source 2019 Emissions (tons)^
AGC Flat Glass	4538011	133.1	19	50 (Evergy Hawthorn)	929^
Evergy Lawrence	4827111	225.5^	44	55 (Evergy Iatan)	812^

^ Based on 2020 emissions.

²⁶ Kansas limited its analysis to Kansas sources of SO₂ emitting at least 100 tpy. We agree with Kansas’ choice to limit its analysis in this way, because in the absence of special factors, for example the presence of a nearby larger source, a high concentration of smaller sources in an area, or unusual physical factors, Kansas sources emitting less than 100 tpy can appropriately be presumed to not be causing or contributing to SO₂ concentrations above the NAAQS.

Table 6 shows the distance from the sources listed therein to the nearest out-of-state source emitting above 100 tpy of SO₂, because elevated levels of SO₂, to which SO₂ emitted in Kansas may have a downwind impact, are most likely to be found near such sources. As shown in Table 6, the distance between the sources in Kansas and the nearest sources emitting over 100 tpy in Missouri is greater than or equal to 50 km. Additionally, Kansas evaluated the current operations and control equipment at the AGC Flat Glass and Evergy Lawrence facilities. In its SIP, Kansas indicated that the AGC Flat Glass facility operates a glass melting furnace which is equipped with dry sorbent injection for control of SO₂.²⁷ The Evergy Lawrence facility is comprised of two units which are both equipped with high-efficiency scrubbers for SO₂ control.²⁸ Kansas evaluated available meteorological data to determine the wind patterns near AGC Flat Glass and Evergy Lawrence. Kansas included wind roses for the Olathe Johnson County airport that depict the predominant wind pattern in the area as being from the South-Southwest blowing emissions from AGC Flat Glass away from Missouri.²⁹ Kansas included wind roses for the Lawrence Municipal airport that depict the predominant wind pattern in the area as being from the South-Southeast blowing emissions from Evergy Lawrence away from the Jackson County nonattainment area.³⁰

Given the large distance between the cross-state sources, the localized nature of SO₂, and the wind rose analysis provided by Kansas, the EPA agrees it is unlikely that emissions from AGC Flat Glass or Evergy Lawrence in Kansas could interact with emissions from Evergy Hawthorn or Evergy Iatan in Missouri in such a way as to cause a violation of the NAAQS in

²⁷ Pursuant to AGC's operating permit No. O-10871, unit EU-001 is subject to an SO₂ emission limit of 2.2 lb of SO₂ per ton of glass produced on a 30-day rolling average, and 262.8 tons of SO₂ emissions per rolling consecutive 12-month period.

²⁸ Pursuant to Evergy Lawrence's operating permit No. O-11856 issued on February 14, 2018, units 4 and 5 are subject to an emissions limit of 0.15 lb/MMBtu on a 30-day rolling average.

²⁹ See Chapter 3 of Kansas' SO₂ Transport SIP Submittal included in the docket for this action for the wind rose graphics referenced by Kansas.

³⁰ See *id.*

Missouri. Additionally, based on the distance from the Kansas sources to the border and the overall wind patterns in the area, the EPA finds it unlikely that the sources in Kansas could on their own cause a violation in Missouri.

The EPA also reviewed the location of sources for which modeling information was not available in neighboring states emitting more than 100 tpy of SO₂ and located within 50 km of the Kansas border, as shown in Table 7. This is because elevated levels of SO₂, to which SO₂ emitted in Kansas may have a downwind impact, are most likely to be found near such sources.

Table 7. Neighboring State SO₂ Sources with No Available Modeling Data Near Kansas*

Source	Facility ID	2019 SO ₂ Emissions (tons)	Distance to Kansas Border (km)	Distance to Nearest Kansas SO ₂ Source (km)	Kansas Source 2020 Emissions (tons)
Evergy Iatan Generating Station (Missouri)	6795111	811.6 [^]	0.7	39 (Kansas City BPU-Nearman)	1,211
Exide Technologies Canon Hollow (Missouri)	331492	158.5	7.1	106 (Kansas City BPU-Nearman)	1,211

* We have not included sources that are duplicative of those in Table 6.

[^] Based on 2020 emissions.

As shown in Table 7, the shortest distance between any pair of these sources is 39 km (between Evergy Iatan in Missouri and Nearman in Kansas). The available modeling data for the Nearman facility, referenced in Tables 4 and 5, indicates that Nearman does not significantly contribute to violations in nearby areas in Missouri as there are no modeled violations in Missouri. Kansas evaluated available meteorological data to determine the wind patterns near Nearman. Kansas included wind roses for the Kansas City downtown airport that depict the predominant wind pattern in the area around Nearman as being from the South-Southwest blowing emissions from Nearman away from the Jackson County nonattainment area.³¹ Additionally, based on the distance between cross-state sources as well as the overall wind

³¹ See Id.

patterns in the area as referenced by Kansas, the EPA agrees that it is unlikely that emissions from Nearman could interact with emissions from Every Iatan or Exide Technologies in such a way as to cause a violation in Missouri.

Kansas also evaluated two sources located within 50 km of its borders that emitted above 80 tpy but below 100 tpy. The CRNF-Coffeyville and CRRM-Refinery facilities are each located 5 km from the Kansas border with Oklahoma. CRNF-Coffeyville emitted 83 tons of SO₂ in 2018. CRRM-Refinery emitted 93 tons of SO₂ in 2018. There are no sources in Oklahoma within 50 km of these sources such that their emissions could interact to impact a violation of the NAAQS. Kansas also included wind roses for the Coffeyville Municipal airport that depict the predominant wind pattern in the area as being from the South blowing emissions from the Kansas sources away from Oklahoma and further into Kansas.³² Given the localized nature of SO₂ and the overall wind pattern in the area as referenced by Kansas, the EPA agrees it is unlikely that the CRNF-Coffeyville and CRRM-Refinery facilities could on their own cause or contribute to a violation in the nearby State of Oklahoma.

This information together with the localized range of potential 1-hour SO₂ impacts indicates that there are no additional locations in neighboring states that would warrant further investigation with respect to Kansas SO₂ emission sources that might contribute to problems with attainment of the 2010 SO₂ NAAQS.

Kansas also included information on mobile source emissions and population in its border counties. Kansas indicated that SO₂ emissions from mobile sources are controlled through federally mandated fuel standards which limit sulfur concentrations at the refinery level. Kansas notes that mobile emissions are disbursed in small quantities over large geographic areas leading to greater dispersion before crossing state borders. Additionally, Kansas expects further reductions in SO₂ emissions from this sector as the EPA continues to regulate emissions from

³² See Id.

mobile sources along with regular fleet turnover to cleaner vehicles. The EPA agrees that because emissions from non-point sources in other source categories such as mobile emissions are more dispersed throughout the State, emissions from other source categories such as mobile sources are less likely to cause high ambient concentrations when compared to a point source on a ton-for-ton basis.

In conclusion, for interstate transport prong 1, we reviewed ambient SO₂ monitoring data and available information for SO₂ emission sources within 50 km of the Kansas border, as well as available modeling results for sources in Kansas and in adjacent states within 50 km of the Kansas border. Based on this analysis, we propose to determine that Kansas will not significantly contribute to nonattainment of the 2010 SO₂ NAAQS in any other state, per the requirements of CAA section 110(a)(2)(D)(i)(I).

3. The EPA's Prong 2 Evaluation

In its prong 2 analysis, Kansas reviewed potential SO₂ impacts on designated maintenance areas. The EPA interprets CAA section 110(a)(2)(D)(i)(I) prong 2 to require an evaluation of the potential impact of a state's emissions on areas that are currently measuring clean data, but that may have issues maintaining that air quality, rather than only former nonattainment, and thus current maintenance, areas. Kansas also performed a prong 2 analysis based on the EPA's interpretation, noting that monitors located near Kansas in neighboring states showed very low levels of SO₂, emissions in Kansas and neighboring states have decreased indicating they should not be considered to have maintenance issues for this NAAQS. Kansas also referenced federal regulations which have resulted in and will continue to result in SO₂ emissions decreases in Kansas and neighboring states.

The EPA has reviewed Kansas' analysis and other available information on SO₂ air quality, including federally enforceable regulations and emission trends to evaluate the state's conclusion that Kansas will not interfere with maintenance of the 2010 SO₂ NAAQS in downwind states. This evaluation builds on the analysis regarding significant contribution to

nonattainment (prong 1), which evaluated monitored ambient concentrations of SO₂ in Kansas and neighboring states, available modeling results, and the large distances between cross-state SO₂ sources, the EPA is proposing to find that SO₂ levels in neighboring states near the Kansas border do not indicate any inability to maintain the SO₂ NAAQS that could be attributed in part to sources in Kansas. As shown in Table 1, the statewide SO₂ emissions from Kansas and neighboring states have decreased substantially over time, per our review of the EPA's emissions trends data.³³ From 2000 to 2019, total statewide SO₂ emissions decreased by the following proportions: Colorado (85% decrease), Kansas (83% decrease), Missouri (72% decrease), Nebraska (40% decrease), and Oklahoma (68% decrease). This trend of decreasing SO₂ emissions does not by itself demonstrate that areas in Kansas and neighboring states will not have issues maintaining the 2010 SO₂ NAAQS. However, as a piece of this weight of evidence analysis for prong 2, it provides further indication (when considered alongside low monitor values in neighboring states as depicted in Table 2) that such maintenance issues are unlikely. This is because the geographic scope of these reductions and their large sizes strongly suggest that they are not transient effects from reversible causes, and thus these reductions suggest that there is very low likelihood that a strong upward trend in emissions will occur that might cause areas presently in attainment to violate the NAAQS. These reductions have been caused by regulatory requirements in Kansas and the downwind states and by economic factors, such as low natural gas prices and the increasing supply of renewable energy, that are not likely to be reversed.³⁴

Kansas also identified EPA programs which, either directly or indirectly, have significantly reduced SO₂ emissions in Kansas. These programs include: the Acid Rain program; the Cross-State Air Pollution Rule (CSAPR); Prevention of Significant Deterioration (PSD)/

³³ Additional emissions trends data are available at: <https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data>.

³⁴ Kansas provided information on emission reductions and control equipment for certain sources in its SIP and the EPA summarized this information in its prong 1 analysis.

New Source Review (NSR) Permitting Programs; Heavy-Duty Diesel Rule; Mercury and Air Toxic Standards Rule (MATS);³⁵ Regional Haze;³⁶ Nonroad Diesel Rule; and the EPA's Tier 2 Motor Vehicle Emissions Standards and Gasoline Sulfur Control Requirements Rule. The EPA agrees that the federal regulations identified by Kansas have helped to reduce SO₂ emissions from various sources in Kansas in addition to other federal regulations as detailed here. The EPA's Acid Rain Program set a permanent cap on the total amount of SO₂ that may be emitted by electric generating units (EGUs) in the contiguous United States.³⁷ CSAPR requires significant reductions in SO₂ emissions from power plants in the eastern half of the United States, including Kansas and neighboring states.³⁸ MATS requires reductions of emissions of heavy metals which, as a co-benefit, reduce emissions of SO₂, and establishes alternative numeric emission standards, including SO₂ (as an alternate to hydrochloric acid).³⁹ The EPA's Nonroad Diesel Rule will reduce sulfur levels from about 3,000 parts per million (ppm) to 15 ppm when fully implemented.⁴⁰ The EPA's Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements (Heavy-Duty Diesel Rule) required refiners to start producing diesel fuel for use in highway vehicles with a sulfur content of no more than 15 ppm as of June 1, 2006.⁴¹ NSPS for various source categories, including but not limited to Industrial-Commercial-Institutional Steam Generating Units;⁴² Sulfuric Acid Plants;⁴³ Stationary Gas and Combustion Turbines;⁴⁴ Portland Cement Manufacturing;⁴⁵ Electric Utility Steam Generating

³⁵ See 77 FR 9304.

³⁶ See 64 FR 35714.

³⁷ See 40 CFR parts 72 through 78.

³⁸ See 40 CFR part 97. See also 76 FR 48208.

³⁹ See 40 CFR parts 60 and 63. See also 77 FR 9304.

⁴⁰ See 40 CFR parts 9, 69, 80, 86, 89, 94, 1039, 1048, 1051, 1065, and 1068. See also 69 FR 38958.

⁴¹ See 40 CFR parts 69, 80, and 86. See also 66 FR 5002.

⁴² See 40 CFR part 60, subpart Da and 40 CFR part 63. See also 77 FR 9304.

⁴³ See 40 CFR part 60, subparts A, D, E, F, G and H. See also 36 FR 24876.

⁴⁴ See 40 CFR part 60, subparts GG and KKKK. See also 71 FR 38482 and 44 FR 52792.

⁴⁵ See 40 CFR parts 60 and 63. See also 75 FR 54970.

Units (Boilers);⁴⁶ and Onshore Natural Gas Processing,⁴⁷ establish standards which reduce SO₂ emissions.

In addition, the EPA's Tier 3 Motor Vehicle Emission and Fuel Standards Rule⁴⁸ also reduce SO₂ emissions by establishing gasoline sulfur standards that reduce SO₂ emissions from certain types of mobile sources. The EPA finds that these federal measures have and continue to lower SO₂ emissions, which, in turn, are expected to continue to support the EPA's proposed conclusion that SO₂ emissions from Kansas will not contribute significantly to nonattainment or interfere with maintenance of the 2010 1-hour SO₂ NAAQS in another state.

As noted in Kansas' submission, any future large sources of SO₂ emissions will be addressed by Kansas' SIP-approved Prevention of Significant Deterioration (PSD) program.⁴⁹ Future minor sources of SO₂ emissions will be addressed by Kansas' minor new source review permit program.⁵⁰ The permitting regulations contained within these programs should help ensure that ambient concentrations of SO₂ in neighboring states are not exceeded as a result of new facility construction or modification occurring in Kansas.

As previously mentioned, Kansas evaluated its potential impacts to the Jackson County, Missouri nonattainment area located near the Kansas border. As discussed in the EPA's prong 1 analysis, the modeling for the Jackson County area's clean data determination included sources in Kansas and did not show substantial impacts from Kansas sources to the Missouri area. Additionally, the EPA has determined the area attained the NAAQS through a clean data determination with the monitor in the area still showing values well below the level of the standard. For these reasons, the EPA finds that emissions from Kansas do not interfere with

⁴⁶ See 40 CFR part 60, subpart Da and 40 CFR part 63. See also 77 FR 9304.

⁴⁷ See 40 CFR part 60, subpart LLL. See also 77 FR 49490.

⁴⁸ See 40 CFR parts 79, 80, 85, 86, 600, 1036, 1037, 1039, 1042, 1048, 1054, 1065, and 1066. See also 79 FR 23414.

⁴⁹ See EPA's final action of the PSD portions of Kansas' SIP, at 80 FR 32017, June 4, 2015.

⁵⁰ Id.

maintenance of the NAAQS in the Jackson County area as the area is not exhibiting difficulties in maintaining the standard.

In conclusion, for interstate transport prong 2, we reviewed additional information about SO₂ air quality and emission trends and Kansas' permitting regulations, as well as the technical information considered for interstate transport prong 1. We find that the combination of low ambient concentrations of SO₂ in Kansas and neighboring states, the available modeling results, the large distances between cross-state SO₂ sources, the downward trend in SO₂ emissions from Kansas and neighboring states, and state measures that prevent new facility construction or modification in Kansas from causing SO₂ exceedances in downwind states, indicates no interference with maintenance of the 2010 SO₂ NAAQS in other states. Accordingly, we propose to determine that Kansas SO₂ emission sources will not interfere with maintenance of the 2010 SO₂ NAAQS in any other state, per the requirements of CAA section 110(a)(2)(D)(i)(I).

B. Nebraska

1. State's Analysis

In its SIP, Nebraska conducted a weight of evidence analysis to examine whether SO₂ emissions from Nebraska adversely affect attainment or maintenance of the 2010 SO₂ NAAQS in downwind states.⁵¹ Nebraska evaluated potential air quality impacts on areas outside the state through an assessment of whether SO₂ emissions from sources located within 50 km of Nebraska's borders may have associated interstate transport impacts. The State's analysis included SO₂ emissions information in the state, with specific focus on sources and counties located within 50 km of Nebraska's borders. For the seven sources which emitted greater than 100 tons per year of SO₂ located within 50 km of Nebraska's borders, Nebraska provided an in-depth analysis by assessing current permitted emissions rates and existing control technologies. Nebraska also reviewed meteorological conditions representative of SO₂ sources near the state's

⁵¹ See Nebraska's SO₂ interstate transport SIP as submitted in October 2020 in the docket for this action.

border, and the distances from identified SO₂ sources in Nebraska to the nearest area that is not attaining the NAAQS or may have trouble maintaining the NAAQS in another state. Nebraska also reviewed statewide emissions and ambient air monitoring trends. Based on this weight of evidence analysis, Nebraska concluded that emissions within the state will not contribute to nonattainment or interfere with maintenance of the 2010 SO₂ NAAQS in neighboring states. Nebraska also noted that SO₂ emissions within the state have been steadily decreasing over time, specifically noting a 49.7% decrease in point source emissions between 2006 and 2019. With regard to the interference with maintenance requirement, Nebraska discussed the low monitored ambient concentrations of SO₂ in neighboring states in the period up to and including 2019. Based on this weight of evidence analysis, Nebraska concluded that emissions within the state will not significantly contribute to nonattainment or interfere with maintenance of the 2010 SO₂ NAAQS in neighboring states.

2. The EPA's Prong 1 Evaluation

The EPA proposes to find that Nebraska's SIP meets the interstate transport requirements of CAA section 110(a)(2)(D)(i)(I), prong 1 for the 2010 SO₂ NAAQS, as discussed below. To support our proposal, we completed a weight of evidence analysis which considers an evaluation of ambient air quality data and of available information for certain emission sources near the Nebraska border, as well as available modeling results for sources in Nebraska or neighboring states within 50 km of Nebraska's borders. Based on that analysis, we propose to find that Nebraska will not significantly contribute to nonattainment of the 2010 SO₂ NAAQS in any other state.

To assess ambient air quality, the EPA reviewed monitoring data in Nebraska and neighboring states to see whether there were any monitoring sites, particularly near the Nebraska border, with elevated SO₂ concentrations that might warrant further investigation with respect to interstate transport of SO₂ from emission sources in Nebraska to a neighboring state near any given monitor. We reviewed 2017-2019 SO₂ design value concentrations at monitors with data

sufficient to produce valid 1-hour SO₂ design values for Nebraska and neighboring states.⁵² In Table 2, we have included all monitors in each neighboring state and in Nebraska within 50 km of the Nebraska border. As shown, there are no violating design values at monitors in Nebraska or neighboring states within 50 km of the state border. One area bordering Nebraska—Woodbury County, Iowa—has been designated unclassifiable. Later in this section, the EPA discusses modeling available for Woodbury County, Iowa (See Table 10). There are no other areas designated as unclassifiable located within 50 km of Nebraska’s borders. For these reasons and for reasons discussed later in this section, the EPA is proposing to find that emissions from Nebraska will not contribute significantly to nonattainment in any other state.

The data presented in Table 2 show that there are three Nebraska monitors located within 50 km of a neighboring state’s border, and these monitors indicate design values between 32% to 55% of the NAAQS. One SO₂ monitor was installed in Nebraska as a source-oriented monitor (AQS Site ID: 310550057) and was sited to characterize the Omaha Public Power District’s (OPPD) North Omaha Station (North Omaha), which is located in Douglas County, Nebraska and is within 50 km of the Nebraska border with Iowa. The EPA designated Douglas County as attainment/unclassifiable as part of the Round 4 designations for the 2010 1-hour NAAQS.⁵³ Table 8 provides the 3-year design value used to characterize the impacts from North Omaha. The 2017-2019 design value is 34 ppb, which is 45% of the 2010 SO₂ NAAQS and provides evidence that there is not an air quality problem around the North Omaha facility. Therefore, it is unlikely that the North Omaha facility could significantly contribute to nonattainment of the 2010 1-hour SO₂ NAAQS in the nearby State of Iowa. In its SIP, Nebraska noted that the North Omaha facility currently operates two coal-fired units, using low-sulfur coal; these units are to be converted to natural gas by 2023. Three coal-fired units were retired in 2016 which resulted in a

⁵² Id.

⁵³ See TSD Chapter 2: Final Round 4 Area Designations for the 2010 1-Hour SO₂ Primary National Ambient Air Quality Standard for Areas without Violating Monitors, at https://www.epa.gov/sites/production/files/2020-12/documents/02-rd4_so2d_tsd_for_areas_without_violating_monitors.pdf

significant SO₂ emissions decrease in that year. The emissions trends for this source are shown in Table 3. Nebraska also referenced the low design values at the monitors located in Omaha (as shown in Table 2) between the North Omaha facility and the Walter Scott Jr. facility in Iowa that similarly support the claim that the North Omaha facility is not causing or contributing to violations of the NAAQS in Iowa.⁵⁴ The North Omaha facility was also included in a modeling demonstration for a nearby Iowa source. That modeling is discussed later in this section and provides further evidence that there are no violations in Iowa to which the North Omaha facility could contribute.

Table 8. Nebraska Sources With a Source-Oriented Monitor Within 50 km of Another State

Nebraska Source	County	2020 Emissions (tons)	Distance from Source to Nebraska/Iowa Border (km)	Site ID	2017-2019 Monitor 3-year design value (ppb)
OPPD North Omaha	Douglas	5,447	0.3	310550057	34

There is one monitor in a neighboring state located within 50 km of the Nebraska border, in Sioux City, South Dakota, and this monitor recorded an SO₂ design value of 3 ppb, or 4% of the 2010 SO₂ NAAQS. Thus, these air quality data do not, by themselves, indicate any particular location that would warrant further investigation with respect to SO₂ emission sources that might significantly contribute to nonattainment in the bordering states. However, because the monitoring network is not necessarily designed⁵⁵ to find all locations of high SO₂ concentrations,

⁵⁴ For locations of monitors in relation to the sources in Nebraska and Iowa, please see map on page 21 of Nebraska's SIP as contained in the docket for this action.

⁵⁵ State monitoring networks must meet the minimum monitoring requirements contained in appendix D to 40 CFR part 58. Specifically, section 4.4 of appendix D outlines the minimum monitoring requirements for SO₂ monitoring based on population weighted emissions. Monitors sited to meet the minimum monitoring requirements are sited for a number of reasons (e.g. measuring a source's maximum contribution, measuring background concentrations, monitoring population exposure, etc.) and may not necessarily capture maximum impacts from specific sources. However, data from these monitors may still provide useful evidence in the context of interstate transport.

this observation indicates an absence of evidence of impact at these locations but is not sufficient evidence by itself of an absence of impact at all locations in the neighboring states. We have therefore also conducted a source-oriented analysis.

In the next step of our weight of evidence analysis, the EPA evaluated available modeling results for sources in Nebraska and in the adjacent states that are within 50 km of the Nebraska border. The purpose of evaluating modeling for sources in Nebraska within 50 km of the Nebraska border is to determine whether these sources are, either on their own or in conjunction with other sources near the border, impacting a violation of the 2010 1-hour SO₂ NAAQS in another state. The purpose of evaluating modeling results in adjacent states within 50 km of the Nebraska border is to ascertain whether there are any modeled violations in neighboring states to which sources in Nebraska could potentially be contributing.

Table 9 provides a summary of the modeling results for one source in Nebraska for which we have available modeling information and is located within 50 km of another state: Omaha Public Power District's (OPPD) Nebraska City Station (Nebraska City).⁵⁶ The modeling analysis for Nebraska City resulted in no modeled violations of the 2010 1-hour SO₂ NAAQS within the modeling domain. The emissions trends for this source are included in Table 3. The most recent available annual emissions at Nebraska City are also provided in Table 9, and the EPA has verified that the most recent annual emissions are below the annual emissions from the years modeled for Nebraska City. The nearest source in a neighboring state emitting greater than 100 tpy is the Walter Scott Jr., Energy Center, located 66 km North of Nebraska City. In its SIP, Nebraska indicated that Nebraska City is comprised of two coal-fired units, one of which (Unit 2) is fitted with a dry flue gas desulfurization (scrubber) system to control SO₂ emissions.

⁵⁶ See the EPA's Technical Support Document for its Intended Round 2 Designations for the 2010 SO₂ NAAQS for Nebraska available at: <https://www.epa.gov/sites/production/files/2016-03/documents/ne-epa-tsd-r2.pdf> and the EPA's Technical Support Document for its Final Round 2 Designations for the 2010 SO₂ NAAQS for Nebraska available at: https://www.epa.gov/sites/production/files/2016-07/documents/r7_ne_final_designation_tsd_06302016.pdf

Emissions at Nebraska City have decreased approximately 36% from 2014. Based on the large distance between cross-state sources, the localized nature of SO₂, and the available modeling information, the EPA agrees that Nebraska City is not likely contributing to violations in Iowa as there are no modeled air quality violations in Iowa.

Table 9. Nebraska Source With Modeling Data Located Within 50 km of Another State

Nebraska Source	County	2020 Emissions (tons)	Distance from Source to Nebraska Border (km)	Other Facilities Included in Modeling	Modeled 99th Percentile 1-hour SO₂ Maximum Concentration (ppb)	Model grid extends into another state?
OPPD Nebraska City	Otoe	11,480	0.62	None	32.7 (<i>based on 2012-2014 actual emissions</i>)	Yes (<i>Fremont County, Iowa</i>)

Table 10 provides a summary of the available modeling results for the modeled sources in neighboring states which are located within 50 km of Nebraska: Mid-American Energy – George Neal North (George Neal North), Mid-American Energy George Neal South (George Neal South) and Mid-American Energy Walter Scott Jr. Energy Center (Walter Scott Jr.) in Iowa. The Round 2 1-hour SO₂ designations modeling for Woodbury County, Iowa explicitly included George Neal North and George Neal South and no other SO₂ sources in the area, and included portions of Nebraska in the modeling domain.⁵⁷ In 2016, the EPA designated Woodbury County, Iowa as unclassifiable, because even though the modeling demonstrated attainment for the area, some emission rates used in the modeling analysis, specifically the emission rates for MidAmerican Energy Company’s George Neal North Units 1 and 2 were not yet federally enforceable at the time of the final Round 2 designations (in June 2016). In September 2016, Iowa rescinded the permits for George Neal North Units 1 and 2 as they were

⁵⁷ See the EPA’s Technical Support Document for its Intended Round 2 Designations for the 2010 SO₂ NAAQS for Iowa available at: <https://www.epa.gov/sites/production/files/2016-03/documents/ia-epa-td-r2.pdf> and the EPA’s Technical Support Document for its Final Round 2 Designations for the 2010 SO₂ NAAQS for Iowa available at: https://www.epa.gov/sites/production/files/2016-07/documents/r7_ia_final_designation_tsd_06302016.pdf

permanently retired.⁵⁸ Therefore, the EPA can consider the Round 2 modeling demonstration for the purpose of evaluating potential transport as the emissions rates assumed in the modeling have since become federally enforceable.⁵⁹ The North Omaha Station is located over 100 km from the George Neal facilities in Iowa. Specifically, there are no sources of SO₂ emitting over 10 tpy in Nebraska located within 50 km of George Neal North and George Neal South, providing further evidence that Nebraska emissions are not causing or contributing to violations in Woodbury County, Iowa.

The modeling submitted by Iowa for Walter Scott Jr. in Pottawattamie County based on a set of hybrid (i.e., a mix of allowable and 2012-2014 actual) emissions for Walter Scott Jr. and the OPPD North Omaha Station located in Nebraska resulted in a maximum impact of 51.1 ppb, or 68% of the level of the NAAQS.⁶⁰ The modeling demonstrates maximum impacts below the level of the NAAQS and thereby provides evidence that Nebraska emissions are not causing or contributing to violations in the area of Pottawattamie County, Iowa around Walter Scott Jr. As depicted in Figure 19 of the EPA's Technical Support Document for its Intended Round 3 Designations for the 2010 SO₂ NAAQS for Iowa, the maximum modeled impact is located to the Southeast of the Walter Scott Jr. facility.⁶¹ The North Omaha Station is located approximately 19 km from the Walter Scott Jr. facility. As previously mentioned, Nebraska also referenced the low design values at the monitors located in Omaha (as shown in Table 2) between the North Omaha facility and the Walter Scott Jr. facility in Iowa that similarly support the claim that the North

⁵⁸ See docket document containing letter from MidAmerican Energy dated April 18, 2016, requesting the permits for George Neal North Units 1 and 2 be rescinded and Iowa's response letter dated September 9, 2016, indicating the permits for these units were revoked.

⁵⁹ The modeling for the George Neal facilities resulted in a maximum impact near the level of the NAAQS; however, because this modeling was based on maximum allowable emissions prior to the shutdown of Units 1 and 2 and included a background concentration, the EPA finds this to be a conservative estimate of actual air quality in the Woodbury County area not an indication of potential air quality issues to which Nebraska sources could contribute.

⁶⁰ See the EPA's Technical Support Document for its Intended Round 3 Designations for the 2010 SO₂ NAAQS for Iowa available at: https://www.epa.gov/sites/production/files/2017-08/documents/14_ia_so2_rd3-final.pdf and the EPA's Technical Support Document for its Final Round 3 Designations for the 2010 SO₂ NAAQS for Iowa available at: <https://www.epa.gov/sites/production/files/2017-12/documents/14-ia-so2-rd3-final.pdf>

⁶¹ See Id.

Omaha facility is not causing or contributing to violations of the NAAQS in Iowa.⁶² Based on the distance between cross-state sources, the localized nature of SO₂ and the available modeling and monitoring information for the area, the EPA agrees that the North Omaha Station is not likely to cause or contribute to violations in Iowa as there are no air quality violations in the nearby area in Iowa.

The most recent available annual emissions of these identified sources in nearby states are also provided in Table 10, and the EPA has verified that the most recent annual emissions are below the annual emissions from the years modeled at each source.⁶³

Table 10. Other States' Sources With Modeling Data Located Within 50 km of Nebraska

Other State Source	County	2020 Emissions (tons)	Distance from Source to Nebraska Border (km)	Other Facilities Included in Modeling	Modeled 99th Percentile 1-hour SO₂ Maximum Concentration (ppb)	Model grid extends into another state?
George Neal North	Woodbury, Iowa	1,660	0.2	George Neal South (Iowa)	74.3 (<i>Allowable Emissions</i>)	Yes (<i>Dakota and Thurston Counties, Nebraska</i>)
George Neal South	Woodbury, Iowa	1,203	0.8	George Neal North (Iowa)	74.3 (<i>Allowable Emissions</i>)	Yes (<i>Dakota and Thurston Counties, Nebraska</i>)
Walter Scott Jr.	Pottawattamie, Iowa	5,960	0.1	OPPD North Omaha (Nebraska)	51.1 (<i>Hybrid of Actual and Allowable Emissions for 2012-2014</i>)	Yes (<i>Douglas and Sarpy Counties, Nebraska</i>)

⁶² For locations of monitors in relation to the sources in Nebraska and Iowa, please see map on page 21 of Nebraska's SIP as contained in the docket for this action.

⁶³ Nebraska also included emissions trends for certain sources in neighboring states in Table 5 of its SIP which depicts the downward trend in emissions at these sources as well. See Nebraska's SIP submittal included in the docket for this action.

The EPA proposes to find that the modeling results summarized in Tables 9 and 10, which provide evidence that air quality near certain larger sources in other states is attaining the NAAQS, when weighed along with the other factors in this document, support the EPA's proposed conclusion that sources in Nebraska will not significantly contribute to nonattainment of the 2010 1-hour SO₂ NAAQS in any other state.

The next step in our weight of evidence analysis, is to assess certain other sources near the border for which we do not have available modeling or monitoring data. As noted in section III of this document, the EPA finds that it is appropriate to examine the impacts of emissions from stationary sources in Nebraska in distances ranging from 0 km to 50 km from the facility, based on the “urban scale” definition contained in appendix D to 40 CFR part 58, section 4.4. Nebraska assessed point sources up to 50 km from neighboring state borders to evaluate trends and SO₂ concentrations in area-wide air quality. The list of sources emitting 100 tpy⁶⁴ or more of SO₂ within 50 km from state borders without available modeling data is shown in Table 11.

Table 11. Nebraska SO₂ Sources Without Available Modeling Data near Neighboring States

Nebraska Source	Facility ID	2019 SO₂ Emissions (tons)	Distance to Nebraska Border (km)	Distance to Nearest Neighboring State SO₂ Source (km)	Neighboring State Source 2019 Emissions (tons)
Clean Harbors Environmental Services, Inc	7768011	205.9	15	95 (HollyFrontier Cheyenne Refinery, Wyoming)	174.7
Western Sugar Cooperative	7767911	144.7	35	107 (Basin Electric Power Cooperative –	5261 [^]

⁶⁴ Nebraska limited its analysis to Nebraska sources of SO₂ emitting at least 100 tpy. We agree with Nebraska’s choice to limit its analysis in this way, because in the absence of special factors, for example the presence of a nearby larger source, a high concentration of small sources in an area, or unusual physical factors, Nebraska sources emitting less than 100 tpy can appropriately be presumed to not be causing or contributing to SO₂ concentrations above the NAAQS.

				Laramie River Station, Wyoming)	
Ash Grove Cement Co	7287311	681.4	24	33 (MidAmerican Energy Co. – Walter Scott Jr., Iowa)	5960^
Douglas Co Recycling Landfill	7699311	164.6	25	41 (MidAmerican Energy Co. – Walter Scott Jr., Iowa)	5960^
Lon D Wright Power Plant	7766111	587.9^	33	59 (MidAmerican Energy Co. – Walter Scott Jr., Iowa)	5960^

^ Based on 2020 emissions

Table 12. Neighboring State SO₂ Sources near Nebraska*

Source	Facility ID	2019 SO ₂ Emissions (tons)	Distance to Nebraska Border (km)	Distance to Nearest Nebraska SO ₂ Source (km)	Nebraska Source 2020 Emissions (tons)
Exide Technologies Canon Hollow (Missouri)	8230311	158.5	7.2	80 (OPPD Nebraska City Station)	11,480

*Table 12 does not include sources duplicative of Table 11.

As shown, there are two Nebraska sources (Ash Grove Cement Company and Douglas County Recycling Landfill) located within 50 kilometers of a cross-state source, MidAmerican Energy Co. – Walter Scott Jr., located in the State of Iowa. As previously discussed and shown in Table 10, modeling submitted to the EPA by the State of Iowa for the Pottawattomie County area, containing Walter Scott Jr., indicates that the highest predicted 99th percentile daily maximum 1-hour concentration within the modeling domain is 51.1 ppb. Additionally, as shown in Table 8, the most recent 3-year design value for Douglas County, Nebraska, containing the North Omaha Station is 34 ppb.

Nebraska evaluated available meteorological data to determine the wind patterns near Ash Grove Cement Company and Douglas County Recycling Landfill. For the Ash Grove Cement Company, Nebraska included a wind rose for the Plattsmouth airport that depicts the predominant wind pattern in the area as being in a Southeast-Northwest pattern which would blow emissions away from the Walter Scott Jr. facility in Iowa.⁶⁵ For the Douglas County Recycling Landfill, Nebraska included a wind rose for the Omaha/Eppley airport that depicts the predominant wind pattern in the area as being in a South-Southeast and North-Northwest wind pattern which would keep emissions from Douglas County Recycling Landfill in Nebraska.⁶⁶ Nebraska also referenced the low design values at the monitors located in Omaha (as shown in Table 2) between the Douglas County Recycling Landfill and the Walter Scott Jr. facility in Iowa that similarly support the claim that the Douglas County Recycling Landfill is not causing or contributing to violations of the NAAQS in Iowa. Based on the respective distances from Ash Grove Cement Company and Douglas County Recycling Landfill to the Nebraska border, the localized nature of SO₂, and the general wind patterns in the area as referenced by Nebraska, the EPA agrees that it is unlikely these Nebraska sources could on their own cause or contribute to a violation in the neighboring State of Iowa.

For the remaining three Nebraska sources listed in Table 11, there are no cross-state sources located within 50 km of the Nebraska source meaning it is unlikely there is an air quality problem in the neighboring state to which the Nebraska sources could contribute. Additionally, based on the distance from each Nebraska source to the border along with the localized nature of SO₂, the EPA finds it unlikely that these sources could on their own cause or contribute to a violation in any other state. As shown in Table 12, Exide Technologies in Missouri is located 7

⁶⁵ See page 24 of Nebraska's SO₂ Transport SIP Submittal included in the docket for this action for the wind rose referenced by Nebraska.

⁶⁶ See page 32 of Nebraska's SO₂ Transport SIP Submittal included in the docket for this action for the wind rose referenced by Nebraska.

km from the Nebraska border; however, there are no Nebraska sources within 50 km which could contribute to a potential air quality problem in Missouri near the Exide facility.

In conclusion, for interstate transport prong 1, we reviewed ambient SO₂ monitoring data and SO₂ emissions information as well as available modeling information for sources both within Nebraska and in neighboring states within 50 km of Nebraska's borders. Based on this analysis, we propose to determine that Nebraska will not significantly contribute to nonattainment of the 2010 SO₂ NAAQS in any other state, per the requirements of CAA section 110(a)(2)(D)(i)(I).

3. The EPA's Prong 2 Evaluation

In its prong 2 analysis, Nebraska reviewed potential SO₂ impacts on designated maintenance areas. The EPA interprets CAA section 110(a)(2)(D)(i)(I) prong 2 to require an evaluation of the potential impact of a state's emissions on areas that are currently measuring clean data, but that may have issues maintaining that air quality, rather than only former nonattainment, and thus current maintenance, areas. Nebraska also performed a prong 2 analysis based on the EPA's interpretation, noting that monitors located near Nebraska in neighboring states showed very low levels of SO₂ and emissions in Nebraska and neighboring states have decreased, indicating they should not be considered to have maintenance issues for this NAAQS.

The EPA has reviewed Nebraska's analysis and other available information on SO₂ air quality and emission trends to evaluate the state's conclusion that Nebraska will not interfere with maintenance of the 2010 SO₂ NAAQS in downwind states. This evaluation builds on the analysis regarding significant contribution to nonattainment (prong 1), which evaluated monitored ambient concentrations of SO₂ in Nebraska and neighboring states, available modeling results, the distances between cross-state SO₂ sources, and other factors. The EPA is proposing to find that SO₂ levels in neighboring states near the Nebraska border do not indicate any inability to maintain the SO₂ NAAQS that could be attributed in part to sources in Nebraska.

As shown in Table 1, the statewide SO₂ emissions from Nebraska and neighboring states have decreased substantially over time, per our review of the EPA's emissions trends data.⁶⁷ From 2000 to 2019, total statewide SO₂ emissions decreased by the following proportions: Colorado (85% decrease), Iowa (76% decrease), Kansas (83% decrease), Missouri (72% decrease), Nebraska (40% decrease), South Dakota (88% decrease) and Wyoming (70% decrease). This trend of decreasing SO₂ emissions does not by itself demonstrate that areas in Nebraska and neighboring states will not have issues maintaining the 2010 SO₂ NAAQS. However, as a piece of this weight of evidence analysis for prong 2, it provides further indication (when considered alongside low monitor values in neighboring states as depicted in Table 2) that such maintenance issues are unlikely. This is because the geographic scope of these reductions and their large sizes strongly suggest that they are not transient effects from reversible causes, and thus these reductions suggest that there is very low likelihood that a strong upward trend in emissions will occur that might cause areas presently in attainment to violate the NAAQS. These reductions have been caused by regulatory requirements in Nebraska and the downwind states and by economic factors, such as low natural gas prices and the increasing supply of renewable energy, that are not likely to be reversed.⁶⁸

The EPA also evaluated federal regulations which have helped to reduce SO₂ emissions from various sources in Nebraska and neighboring states. The EPA's Acid Rain Program set a permanent cap on the total amount of SO₂ that may be emitted by EGUs in the contiguous United States.⁶⁹ CSAPR requires significant reductions in SO₂ emissions from power plants in the eastern half of the United States, including Nebraska and neighboring states.⁷⁰ MATS requires reductions of emissions of heavy metals which, as a co-benefit, reduce emissions of SO₂,

⁶⁷ Additional emissions trends data are available at: <https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data>.

⁶⁸ Nebraska provided information on emission reductions and control equipment for certain sources in its SIP and the EPA summarized this information in its prong 1 analysis.

⁶⁹ See 40 CFR parts 72 through 78.

⁷⁰ See 40 CFR part 97. See also 76 FR 48208.

and establishes alternative numeric emission standards, including SO₂ (as an alternate to hydrochloric acid).⁷¹ The EPA's Nonroad Diesel Rule will reduce sulfur levels from about 3,000 parts per million (ppm) to 15 ppm when fully implemented.⁷² The EPA's Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements (Heavy-Duty Diesel Rule) required refiners to start producing diesel fuel for use in highway vehicles with a sulfur content of no more than 15 ppm as of June 1, 2006.⁷³ NSPS for various source categories, including but not limited to Industrial-Commercial-Institutional Steam Generating Units;⁷⁴ Sulfuric Acid Plants;⁷⁵ Stationary Gas and Combustion Turbines;⁷⁶ Portland Cement Manufacturing;⁷⁷ Electric Utility Steam Generating Units (Boilers);⁷⁸ and Onshore Natural Gas Processing,⁷⁹ establish standards which reduce SO₂ emissions.

In addition, the EPA's Tier 3 Motor Vehicle Emission and Fuel Standards Rule⁸⁰ also reduce SO₂ emissions by establishing gasoline sulfur standards that reduce SO₂ emissions from certain types of mobile sources. The EPA finds that these federal measures have and continue to lower SO₂ emissions, which, in turn, are expected to continue to support the EPA's proposed conclusion that SO₂ emissions from Nebraska will not contribute significantly to nonattainment or interfere with maintenance of the 2010 1-hour SO₂ NAAQS in another state.

As noted in Nebraska's submission, any future large sources of SO₂ emissions will be addressed by Nebraska's SIP-approved PSD program.⁸¹ Future minor sources of SO₂ emissions will be addressed by Nebraska's minor new source review permit program.⁸² The permitting

⁷¹ See 40 CFR parts 60 and 63. See also 77 FR 9304.

⁷² See 40 CFR parts 9, 69, 80, 86, 89, 94, 1039, 1048, 1051, 1065, and 1068. See also 69 FR 38958.

⁷³ See 40 CFR parts 69, 80, and 86. See also 66 FR 5002.

⁷⁴ See 40 CFR part 60, subpart Da and 40 CFR part 63. See also 77 FR 9304.

⁷⁵ See 40 CFR part 60, subparts A, D, E, F, G and H. See also 36 FR 24876.

⁷⁶ See 40 CFR part 60, subparts GG and KKKK. See also 71 FR 38482 and 44 FR 52792.

⁷⁷ See 40 CFR parts 60 and 63. See also 75 FR 54970.

⁷⁸ See 40 CFR part 60, subpart Da and 40 CFR part 63. See also 77 FR 9304.

⁷⁹ See 40 CFR part 60, subpart LLL. See also 77 FR 49490.

⁸⁰ See 40 CFR parts 79, 80, 85, 86, 600, 1036, 1037, 1039, 1042, 1048, 1054, 1065, and 1066. See also 79 FR 23414.

⁸¹ See EPA's final action of the PSD portions of Nebraska's SIP, at 83 FR 14179, April 2, 2018.

⁸² *Id.*

regulations contained within these programs should help ensure that ambient concentrations of SO₂ in neighboring states are not exceeded as a result of new facility construction or modification occurring in Nebraska.

In conclusion, for interstate transport prong 2, we reviewed additional information about SO₂ air quality and emission trends, federal regulations, and Nebraska's permitting regulations, as well as the technical information considered for interstate transport prong 1. We find that the combination of low ambient concentrations of SO₂ in Nebraska and neighboring states, available modeling results, the distances between cross-state SO₂ sources, the downward trend in SO₂ emissions from Nebraska and surrounding states, and state measures that prevent new facility construction or modification in Nebraska from causing SO₂ exceedances in downwind states, indicates no interference with maintenance of the 2010 SO₂ NAAQS from Nebraska in other states. Accordingly, we propose to determine that Nebraska SO₂ emission sources will not interfere with maintenance of the 2010 SO₂ NAAQS in any other state, per the requirements of CAA section 110(a)(2)(D)(i)(I).

V. Requirements for Approval of a SIP Revision

The State submissions have met the public notice requirements for SIP submissions in accordance with 40 CFR 51.102. The submissions also satisfied the completeness criteria of 40 CFR part 51, appendix V. Kansas provided public notice on its SIP revision from January 16, 2020, to February 17, 2020, and received no comments. Nebraska provided public notice on its SIP revision from September 14, 2020, to October 16, 2020, and received no comments. In addition, the revision meets the substantive SIP requirements of the CAA, including section 110 and implementing regulations.

VI. Proposed Action

The EPA is proposing to approve the following submittals as meeting the interstate transport requirements of CAA section 110(a)(2)(D)(i)(I) for the 2010 SO₂ NAAQS: Kansas' April 7, 2020 submittal and Nebraska's October 27, 2020 submittal. The EPA is proposing this

approval based on our review of the information and analysis provided by each state, as well as additional relevant information, which indicates that in-state air emissions will not contribute significantly to nonattainment or interfere with maintenance of the 2010 SO₂ NAAQS in any other state. This action is being taken under section 110 of the CAA.

VII. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, these proposed actions merely approve state law as meeting federal requirements and do not impose additional requirements beyond those imposed by state law. For that reason, these proposed actions:

- Are not significant regulatory actions subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Do not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Are certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Do not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Do not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Are not economically significant regulatory actions based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Are not significant regulatory actions subject to Executive Order 13211 (66 FR 28355, May 22, 2001);

- Are not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because this action does not involve technical standards; and
- Do not provide the EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, these SIPs are not approved to apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide, Volatile organic compounds.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: June 8, 2021.

Edward H. Chu,
Acting Regional Administrator,
Region 7.

For the reasons stated in the preamble, the EPA proposes to amend 40 CFR part 52 as set forth below:

PART 52--APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart R-Kansas

2. In §52.870, the table in paragraph (e) is amended by adding the entry “(46)” in numerical order to read as follows:

§52.870 Identification of plan.

* * * * *

(e) ***

EPA-APPROVED KANSAS NONREGULATORY PROVISIONS

Name of nonregulatory SIP provision	Applicable geographic or nonattainment area	State submittal date	EPA approval date	Explanation
* * * * *				
(46) Section 110(a)(2)(D)(i)(I)—significant contribution to nonattainment (prong 1), and interfering with maintenance of the NAAQs (prong 2) (Interstate Transport) Infrastructure Requirements for the 2010 SO ₂ NAAQS	Statewide	4/7/2020	[Date of publication of final rule in the Federal Register], [Federal Register citation of the final rule]	[EPA-R07-OAR-2021-0365; FRL-10024-81-Region 7]. This action addresses the following CAA elements: 110(a)(2)(D)(i)(I)—prongs 1 and 2.

Subpart CC-Nebraska

3. In §52.1420, the table in paragraph (e) is amended by adding the entry “(37)” in numerical order to read as follows:

§52.1420 Identification of plan.

* * * * *

(e) ***

EPA-APPROVED NEBRASKA NONREGULATORY PROVISIONS

Name of nonregulatory SIP provision	Applicable geographic or nonattainment area	State submittal date	EPA approval date	Explanation
* * * * *				
(37) Section 110(a)(2)(D)(i)(I)—significant contribution to nonattainment (prong 1), and interfering with maintenance of the NAAQs (prong 2) (Interstate Transport) Infrastructure Requirements for the 2010 SO ₂ NAAQS	Statewide	10/27/2020	[Date of publication of final rule in the Federal Register], [Federal Register citation of the final rule]	[EPA-R07-OAR-2021-0365; FRL-10024-81-Region 7]. This action addresses the following CAA elements: 110(a)(2)(D)(i)(I)—prongs 1 and 2.

[FR Doc. 2021-12501 Filed: 6/14/2021 8:45 am; Publication Date: 6/15/2021]